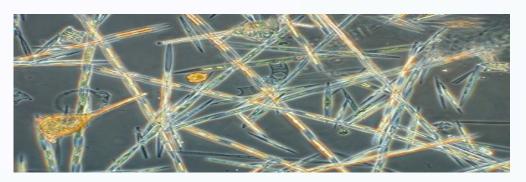
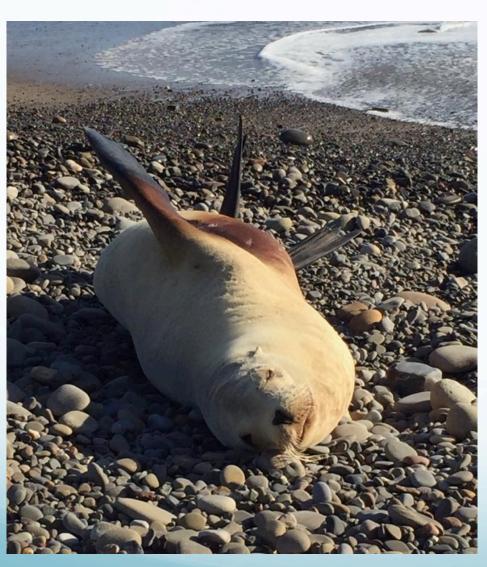
What is Domoic Acid (DA)?

- Neurotoxin produced during an algal bloom by a specific phytoplankton (Pseudo-nitzschia australis)
- Naturally occurring phenomenon, algae does not always have neurotoxin present
- Also known as Harmful Algal Blooms (HABs) and "Red Tide"
- Typically occurs in spring and fall with upwelling from wind, rain and currents along with warmer ocean temperatures
- HABs can occur after heavy rains when agricultural runoff and storm water enters our watershed





How are marine mammals affected?



- Filter-feeding fish and shellfish consume without effects and store toxin in their gills/viscera
- Most common species affected by DA are California sea lions and common dolphins
- DA causes variable levels of neurological damage
- In humans this illness is called Paralytic Shellfish Poisoning

Domoic Acid (DA) Toxicosis

Signs and Symptoms:

- Lethargy
- Disorientation
- Head bobbing and weaving
- Foaming at the mouth
- Vomiting
- Eyes bulging

- Muscle spasms
- Seizures (Petit to Grand Mal)
- Unresponsiveness
- Inability to move out of water
- Coma
- Death in severe cases

CIMWI Protocol & Best Practices

How to protect animals and keep people safe

- Nothing can be done to stop or reverse the brain damage
- Symptoms of acute DA typically subside after 72 hours
- Rescuing and transporting an animal for care is stressful and the additional stress may affect the immediate survival of animals with DA

- Animals with DA are usually put under observation in a safe perimeter
- Educational signs, wooden stakes and flagging tape are used to make a perimeter around the animal
- Volunteers spend time talking with and educating the public



If you find a marine mammal with DA

DO NOT do the following:

Touch, feed, harass, cover, pour water on, allow dogs near, coax animal into the water or get close enough to take selfies.

Use Extra Caution!

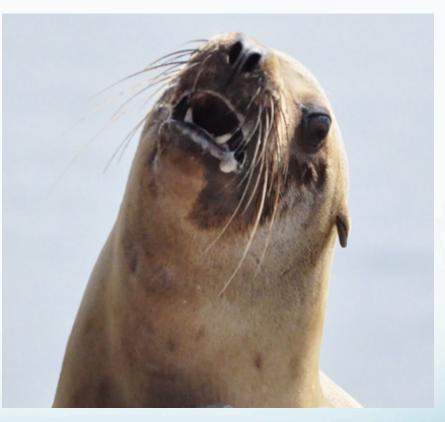
It is critical to use extra caution with DA animals, they may appear unresponsive but can become alert at any time and respond aggressively.

DO NOT Remove from Water Line

Do not attempt to get the animal back in the water or rescue it. This is illegal, dangerous and may jeopardize the immediate health of the animal.

Call Rescue Hotline

Provide name, phone number and specific information about animal and its location.



CIMWI Rescue Hotline (805) 567-1505

Marine Mammal Stranding Network

CIMWI is a part of the Marine Mammal Health and Stranding Response Program under the direction of NOAA's National Marine Fisheries Service



CIMWI is the only organization authorized to respond to and rehabilitate pinnipeds (seals and sea lions) and rescue and triage cetaceans (whales and dolphins) and sea turtles for Santa Barbara County and Ventura County

Channel Islands Marine & Wildlife INSTITUTE

Channel Islands Marine & Wildlife Institute (CIMWI) is dedicated to positively impacting conservation through marine mammal rescue, rehabilitation, research and education to promote ocean and human health

